Notice of Allowability	Application No.	Applicant(s)	
	09/884,555	DE LA CHAPELLE ET AL.	
	Examiner	Art Unit	
	Perez M. Angelica	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *05/11/2005*.

2. ☒ The allowed claim(s) is/are *1-5,21-25 and 27*.

3. ☒ The drawings filed on *06 August 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date Feb. 11, 2002, MAY 9, 2002, 12/19/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

Claims 1-5, 21-25 and 27 are allowed.

1. Regarding claim 1, the previous art of record teaches of a method for managing radio frequency (RF) transmissions from an RF system of at least one mobile platform operating within a predetermined coverage region to a space-based transponder orbiting within the coverage region, in a manner to maintain a signal-to-noise ratio (Eb/No) of the RF transmissions within a predetermined range, the method comprising the steps of: using a first control loop to monitor, by a central controller, a signal-to-noise ratio of said RF transmissions received by the satellite transponder, and to transmit commands to the mobile platform via the satellite transponder for maintaining the signal-to-noise ratio within a predetermined range and maintaining a power spectral density (PSD) of the RF transmissions within the predetermined limit and of enabling changes to the power level of the RF transmissions from the antenna of the mobile platform to further ensure the PSD of the RF transmissions does not exceed the predetermined limit.

The previous art of record fails to teach of a **second control loop including a mobile system of the mobile platform to monitor and adjust a power level of said RF transmissions to the satellite transponder, inbetween receipt of the commands from the central controller, to thereby maintain the power level of the RF transmissions at a previously commanded level, inbetween receipt of updated command signals from the central controller.**

Regarding claim 21, the previous art of record teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system of at least one mobile platform operating within a predetermined coverage region to a space-based transponder orbiting within the coverage region, in a manner to maintain a signal-to-noise ratio (Eb/No) of the RF transmissions within a predetermined range, the method comprising: using a first control loop to enable a controller to monitor and adjust a power level of the RF transmissions transmitted from an antenna of the mobile platform; the step of monitoring by a central controller comprises monitoring by a ground-based central controller located within the coverage region.

The previous art of record fails to teach of forming **a second control loop between the spaced-based signal relaying device and the mobile platform and the satellite transponder to monitor and maintain the signal-to-noise ratio at a previously commanded level, the second control loop including the steps of: monitoring the signal-to-noise ratio of said RF transmissions between the mobile platform and the satellite transponder; adjusting the power level of the RF transmissions to maintain the power level at the previously commanded level.**

Regarding claim 24, the previous art of record teaches of a method for managing radio frequency (RF) transmissions from an RF system of at least one mobile platform operating within a predetermined coverage region to a space-based transponder orbiting within the coverage region, in a manner to maintain a signal-to-noise ratio (Eb/No) of the RF transmissions within a predetermined range, of using a controller to form a first power level control loop for monitoring a power of signals relayed by the

space-based transponder from the mobile platform; using the controller to generate first power level commands and transmitting the power level commands to the space based transponder for subsequent relay back to the mobile platform.

The previous art of record fails to teach and forming a **second power level control loop between the mobile platform and the space-based transponder, where the mobile platform is able to implement second power level commands to signals transmitted from its RF system independently of the receipt of the first power commands from the controller.**

Regarding claim 27, the previous art of record teaches of a method for managing radio frequency (RF) transmissions from an RF system of at least one mobile platform operating within a predetermined coverage region to a space-based transponder orbiting within the coverage region, in a manner to maintain a signal-to-noise ratio (Eb/No) of the RF transmissions within a predetermined range, using a controller to form a first power control loop for monitoring a power level of the RF transmissions relayed by the space-based transponder from the mobile platform; using the controller to generate first power level commands and transmitting the power level commands to the space based transponder for subsequent relay back to the mobile platform.

The previous art of record fails to teach and forming a **second power level control loop between the mobile platform and the space-based transponder for enabling the mobile platform to monitor a power level of the RF transmission transmitted from the mobile platform**.

Claims 2-5 and 22-23 and 25 depend on claims 1, 21 and 24, respectively; therefore, the same reasons for allowance are given to them as in the independent claims 1, 21 and 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

Angelica Perez
(Examiner)

NAY MAUNG
SUPERVISORY PATENT EXAMINER

Art Unit 2684

May 19, 2005